

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY BY E.P.A.
REGION IX
COMM. CENTER

DATE:

FEB 4 12 42 PM '80

SUBJECT: Interagency Agreement on Aquifer Mapping

Thomas E. Belk, Chief

FROM: Ground Water Protection Branch (WH-550)

Water Supply Branch Chiefs (I-X)

TO:

Enclosed for your information is a letter from Mr. H. William Menard of the Water Resources Division of the U.S. Geological Survey. Upon the request of EPA, the Geological Survey has agreed to provide the required information to the extent possible for preparation of aquifer mapping to use in the Underground Injection Control (UIC) program. Complete mapping of all the aquifers in a State would be most desirable. However, it is not always possible due to resource constraints. Therefore, aquifer mapping for use in the UIC program for designating underground drinking water sources shall focus on the identification of all aquifers, or parts of aquifers which may be exempted as underground sources of drinking water, based on the proposed regulation 40 CFR § 146.04 which reads as follows:

"The Director need not designate an aquifer or part thereof with fewer than 10,000 milligrams per liter of total dissolved solids if the aquifer or part thereof:

- (a) Does not currently serve as a source of drinking water; and
- (b) Cannot now and will not in the future serve as a source of drinking water because:
 - (1) It is mineral, oil, or geothermal energy producing;
 - (2) It is situated at a depth or location which makes recovery of water for drinking water purposes economically or technologically impractical; or
 - (3) It is so contaminated that it would be economically or technologically impractical to render the water fit for human consumption."

These areas identified shall be described in clear geographic and geometric terms (40 CFR § 122.33). The Administrator (or State Director) may then designate that

all other aquifers or parts of aquifers with less than 10,000 mg/l total dissolved solids (TDS) within the State as underground sources of drinking water. As the letter indicates, the available technical information varies from state to state, as well as within each state. In the case of insufficient information, additional information might need to be gathered to meet the needs of the Agency. Furthermore, we will need to notify the United States Geological Survey (USGS) Headquarters as early as possible when a need arises to map aquifers in any particular state. It would be worthwhile to make preliminary contact with the regional or district offices of the USGS in regards to their potential assistance in aquifer mapping. The Ground Water Program Guidance Numbers 7.1 and 7.2, and the enclosed interagency agreement and correspondence would aide in this contact. The following procedures in obtaining assistance in aquifer mapping of a non-primacy State has been established:

- (i) EPA Regional offices shall notify EPA Headquarters after the need of aquifer mapping has been established;
- (ii) EPA Headquarters will request USGS Headquarters to initiate an aquifer mapping activity;
- (iii) The Headquarters will notify the regional or district offices of the proposed mapping study;
- (iv) Proceed with negotiations at the regional level;
- (v) The USGS district will provide the EPA region an area specific work plan and a written preliminary time-and-cost estimate for the work;
- (vi) EPA region notifies USGS district in writing that the work plan and estimates are acceptable;
- (vii) Proceed with work in accordance with work plan mutually agreed upon.

USGS will bill EPA on a reimbursable basis for services for each aquifer study and will include all costs such as, but not limited to, direct labor, support services, supplies, material, equipment, etc., for an amount that is agreed to by both parties of this agreement before work commences. The early determination of the States for which maps are required is needed to accomplish our task and to develop the most valuable information possible.

Therefore, it is important that the requests for USGS assistance are made on a timely basis. Your cooperation in this regard will be greatly appreciated. Please keep this office informed of your needs for assistance.

Enclosure



United States Department of the Interior

GEOLOGICAL SURVEY
RESTON, VA. 22092

In Reply Refer To:
EGS-225144
Mail Stop 411

NOV 8 - 1979

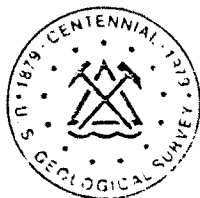
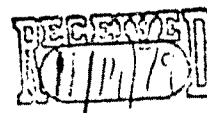
Mr. Alan Levin, Director
State Programs Division (WH-550)
U.S. Environmental Protection Agency
Washington, D.C. 20460

Dear Mr. Levin:

Your letter of October 19, 1979, requests that the Geological Survey prepare aquifer maps to aid implementation of the Environmental Protection Agency's underground injection control (UIC) program. The Geological Survey agrees to provide the required map information itemized on the first page of your letter and, to the extent possible, the refinements and narrative information listed on page two.

Your letter notes, also, that development of the maps will require comprehensive study and analysis. As discussed at the June 25, 1979, joint planning meeting, the amount and quality of relevant technical information available differs widely from State to State, and within each State. The maps produced will differ in detail and accuracy accordingly. For some States preparation of satisfactory maps will entail collection of additional well data, including geophysical logs of oil and gas test holes; some areas may require test drilling and logging to provide adequate data to meet your needs.

We will notify our regional and district offices of your letter of request. You indicate that we will be kept informed of needs for assistance, and we will take no additional actions until we hear from you again. Procedures for transfer of funds, accommodations to personnel constraints in some States, and other administrative arrangements can be addressed at that time. Mr. Leonard A. Wood, Coordinator of the Survey's Sub-surface Waste Program, is designated our contact for this undertaking. Mr. Wood's address and telephone number are: U.S. Geological Survey, Water Resources Division, National Center, Mail Stop 411, Reston, Virginia 22092, 703 860-6904.



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Early determination of the States for which maps are required will aid us in scheduling investigations in those States. As you know, all our personnel are fully occupied with ongoing projects, and we will need to reprogram in order to accommodate your tasks. Please keep us informed of developments in the UIC program that impact on our participation. Owing to heavy commitments and limited personnel, our district offices will welcome as much lead time as possible.

Sincerely yours,

for *J. A. Craycraft, Jr.*
H. William Menard
Director

Copy to: Mr. Wood